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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,966	01/29/2004	Takehiro Yoshida	12706/9	2351
23838	7590	05/04/2005	EXAMINER	
KENYON & KENYON 1500 K STREET, N.W., SUITE 700 WASHINGTON, DC 20005			CONSILVIO, MARK J	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/765,966

Applicant(s)

YOSHIDA, TAKEHIRO

Examiner

Mark Consilvio

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/29/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 1/29/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

Figure 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (JP Patent Publication No. 08-043739) in view of Rhodes (US Patent No. 3,639,039).

With respect to claim 1, Takashi discloses a spectroscope that resolves a light beam (311) into separated light beams having various wavelengths, and selects and extracts a separated light beam having an arbitrary wavelength from among these separated light beams, comprising: a masks (10-12) that limit a transmission area of each of the separated light beams in a spectrum direction, where said spectrum direction denotes a direction of the arrangement of these separated light beams when viewed against the line of the resolved separated light beams. Takashi does not disclose multiple masks that limit transmission area of each of the separated light beams in a direction perpendicular to said spectrum direction. However, Rhodes discloses masks (23, 25) that limit transmission in two perpendicular directions that may be rotated and aligned as desired. At the time the invention was made, it would have been obvious to a person

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of ordinary skill in the art to combine the teachings of Takashi and Rhodes to provide masks to allow for greater flexibility in adjustment of the aperture and thus spectral and spatial resolution.

With respect to claim 2, Takashi discloses a small aperture (part of 8) that focuses said light beam before resolution. While Takashi does not expressly disclose that the aperture is square and a direction of one of diagonals of said small aperture is parallel to said spectrum direction, square apertures are well known in the art. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Takashi and Rhodes to provide a square aperture where a direction of one of diagonals of said small aperture is parallel to said spectrum direction. One of ordinary skill in the art would have been motivated to do this to allow only focused light from the optical system to be detected.

With respect to claim 3, while Takashi implies an adjustment device that adjusts the relative positions of each of said masks, Rhodes expressly discloses such adjustment devices (12a, 18a, 19a). Neither reference teaches the adjustment device also adjusts each of the separated light beams that propagate towards these masks. However, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Takashi and Rhodes to an adjustment device that adjusts the relative positions of each of said masks and also adjusts each of the separated light beams that propagate towards these masks. One of ordinary skill in the art would have been motivated to do this to allow coordination between position of the reflected light beams and position of their respective apertures to filter the desired spectral region.

With respect to claim 4, Takashi and Rhodes do not expressly disclose a reflection preventing means provided on a shielding surface on one or both of said masks on which said

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separated light beams are impinged. However, such reflection preventing means are well known in the art and are commonly used on masks. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Takashi and Rhodes to provide a reflection preventing means provided on a shielding surface on one or both of said masks on which said separated light beams are impinged. One of ordinary skill in the art would have been motivated to do this to reduce the amount of retroreflections in the optical system that may produce undesirable interference effects.

With respect to claim 5, Takashi and Rhodes do not expressly disclose a shielding surface on one or both of said masks that is impinged by said separated light beams is slanted so as to avoid facing an optical device adjacent to said shielding surface. However, one of ordinary skill would immediately recognize that the shield surface of the masks could be slanted. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Takashi and Rhodes to provide a shielding surface on one or both of said masks that is impinged by said separated light beams is slanted so as to avoid facing an optical device adjacent to said shielding surface. One of ordinary skill in the art would have been motivated to do this to keep light from reflecting directly back through the optical system

With respect to claim 6, Takashi discloses lenses (16-18) disposed in opposition are adjacent to said masks; and surfaces of said lenses that are opposite to said masks have a convex shape that is convex towards these masks.

With respect to claim 7, Takashi discloses a confocal scanning microscope that resolves a light beam from an observation object (19) into separated light beams of various wavelengths, selects a separated light beam having an arbitrary wavelength from among these separated light

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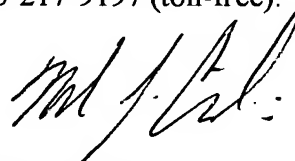
beams, and receives the selected separated light beam at a photodetector (13-15), comprising: the spectroscope according to any one of Claim 1 through Claim 6 being provided between the light paths from said observation object towards said photodetector.

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Consilvio whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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